Darwin Initiative: Final Report

*To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

Darwin Project Information

Project reference	23-033
Project title	Marrying community land rights with stakeholder aspirations in Indonesian Borneo
Host country(ies)	Indonesia
Lead organisation	DICE, University of Kent
Partner institution(s)	Fauna & Flora International (FFI), University of Queensland, Borneo Futures, Indonesian Institute of Sciences (LIPI), Bangor University
Darwin grant value	£291,185
Start/end dates of project	1 Jun 2016 – 31 May 2019
Project leader's name	Matthew Struebig
Project website/blog/Twitter	https://research.kent.ac.uk/meps/
Report author(s) and date	Matthew Struebig and Erik Meijaard, 13th June 2019

1 Project Rationale

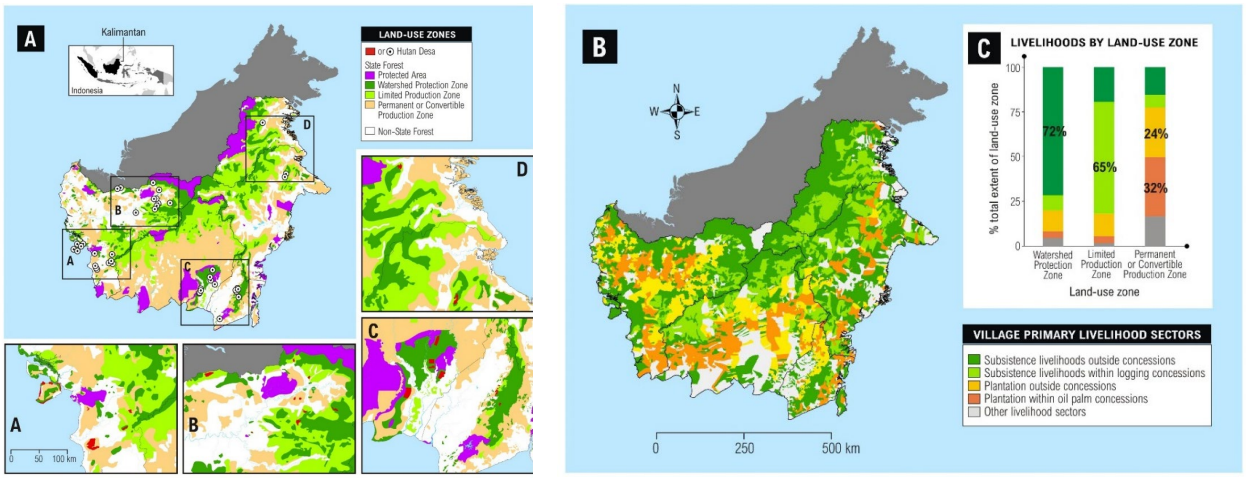

Figure 1. Area currently allocated to community forestry (*Hutan Desa,* HD), in Kalimantan. Other land uses are strict protected areas (PA), watershed protection forest (HL), limited production forest (HPT), permanent production forest (HP), convertible production forest (HPK), and non-forest estate (APL). The main HD areas include our study region in (A) Ketapang regency, southern West Kalimantan, and (B) Kapuas Hulu regency, northern part of West Kalimantan, as well as (C) Central and South Kalimantan, and (D) East and North Kalimantan. Black lines indicate provincial boundaries.

Although global treaties (e.g. CBD, UNFCCC) emphasise the importance of ecosystem services for human well-being, ongoing deforestation and fires demonstrate that these values remain disconnected from land-use decisions in Indonesia. Sixty six percent of Indonesia's poor live in or around forest, so deforestation impacts local livelihoods as well as globally important forest biodiversity. Policy changes that better capture the costs and benefits of land-use decisions are needed but have been slow to develop until recently.

Community forest management is championed as a way to benefit local livelihoods and forest conservation, and Indonesia now recognizes this as part of its efforts to reduce poverty. A constitutional court decision in 2012 stated that Indonesia's past appropriation of forest lands to the State was in conflict with basic human rights, and should thus be revised. Subsequently, the government put policies into place that grant 12.7 million hectares of land and forest use rights back to indigenous communities.

Various forms of community land and forest rights have now been developed under a 'social forestry' umbrella, which includes village forest (*hutan desa*), village use (*hutan masyarakat*) forest, and customary land (*hutan adat*, in non-State forest areas). The overall assumptions are that more secure and private land rights will automatically benefit income for rural people, while increased tenure security is expected to have significant environmental benefits through reduced deforestation and forest degradation, and better management of common resources, such as clean water. The transfer of land rights from the State to rural people is thought to be a potential triple-win for social, economic and environmental objectives.

Nevertheless, the above assumptions remain largely untested. Pilot sites run and financed by governmental or non-governmental groups are upheld as evidence that community forest management results in reduced poverty, deforestation, and improved biodiversity conservation. However, the scalability of these projects is unclear. It is uncertain whether the successes achieved in selected sites and following several years of intensive engagement, funding, capacity building and monitoring are representative of overall trends, or whether they can be replicated rapidly across the country.

Under the Darwin Initiative-funded MEPS project (*Monitoring dan Evaluasi Perhutanan Sosial* – monitoring and evaluation of community forestry) we sought to inform the political debate on community forestry in Indonesia, and help evaluate performance of the programme to date. For the first time in Indonesia we brought together statistically relevant spatial information to answer key questions about the impact of community forestry on poverty and deforestation, and, by inference, biodiversity. We also assessed the organizational conditions under which projects are likely to succeed or fail. The aim was to use these findings in collaboration with stakeholders involved in community forestry to develop tools that will help the government prioritize spending and spatial allocation of funds to new sites, as well as monitor the effectiveness of land reforms into the future. Our project was based in Kalimantan (Indonesian Borneo), focusing case-studies in two regions of West Kalimantan province, but with outputs and engagement activities targeted island-wide (Figure 1). We focussed on the implementation of *hutan desa* as the main social forestry scheme operating in Kalimantan and much of Indonesia.

2 Project Partnerships

The project was led by DICE University of Kent who provided scientific support alongside the Center of Excellence for Environmental Decisions at University of Queensland. The involvement of Borneo Futures and the Indonesian Institute of Sciences (LIPI), both research organizations with a mandate to bridge the interface between science and policy, ensured that the science produced was effectively translated into language and tools useful to end-users. Flora and Fauna International (FFI) joined the project in June 2016 to provide the vital practical angle to our project. FFI have for years experimented with community forestry in Indonesia, and understand the reality of implementing these policies on the ground. Importantly, FFI have a very strong relationship with local governments in Kalimantan, and work with a network of other NGOs facilitating community forestry in other parts of Indonesia. Thus FFI had a crucial role ensuring that lessons learned from the research component of the project were transferred to decision-making stakeholders with a view towards policy change. Representatives from all partners formed a Project Steering Group (PSG) as a conduit for internal reporting and approval of decisions during the running of the project. The PSG communicated via Skype approximately every month (see Annex 7.1.1, 7.2.1 & 7.3.1 for meeting minutes), and met as a full (or near-full) team at least once a year in Indonesia. All authors contributed and approved the final report.

By its very nature the project had strong engagement with government. LIPI, a government research agency, was a formal partner on the project. Moreover, our principle target audiences were the working groups on social forestry (*Kelompok Kerja Percepatan Perhutanan Social*, POKJA-PS), which largely comprise representatives from government departments at local administrative levels (e.g. province, regency and district). Land-use decisions in Indonesia are increasingly devolved to local administrations, so each province tends to have its own POKJA which has the autonomy to allocate and monitor social forestry areas, and is responsible for reporting to national targets.

Our main challenge was a turnover in staff, as people inevitably developed new responsibilities or new posts over the course of the project. LIPI was our main partner at the onset of the project, but then couldn't accept foreign funds due to organisational restructuring. FFI then stepped into this role and we reconfigured staff responsibilities and strategic direction to suit their interests within the sector, which all will agree contributed to our project's success. Partners communicate well, and our frequent meetings (particularly those in Indonesia) have helped forge lasting friendships and cement fruitful collaborations in other areas (e.g. biodiversity assessment in Sulawesi). We are confident we will continue to work

together in the foreseeable future, and as a team we will seek funds to continue our work to help the government scale up our monitoring and evaluation techniques more broadly across Indonesia.

3 Project Achievements

3.1 Outputs

We set three outputs for the project, all of which were achieved:

1. *A robust evidence base (incl. pre-intervention baseline) available to assess CF and evaluate consequences on human livelihoods and environment.*
2. *Guidance on CF assessment widely disseminated amongst government and NGO stakeholders, and contributing to increased advocacy and new CF development in West Kalimantan.*
3. *Increased understanding and capacity to transparently manage, monitor and evaluate land for CF within government.*

Output 1 - evidence base for CF evaluation

Much of the first half of the project involved consulting with local government and NGOs to compile an evidence-base to help inform the allocation of social forestry into areas likely to lead to positive outcomes for conservation and local communities. These datasets included annual maps of forest-cover as a proxy for biodiversity provisions, as well as forest fires, livelihood information and poverty status (Indicator 1.1; Annex 7.1.3, and website 'MEPS maps' page). From these initial consultations at national and provincial level it was clear that nationwide decisions of where social forestry could be allocated had already been undertaken – the Ministry of Forest and Environment later published their indicative national online (*Peta Indikatif Areal Perhutanan Sosial*; Indicator 1.3), and most land-use zones were open to applications from communities. Rather than informing allocation decisions *per se*, government personnel were more interested in methods and datasets that could help inform what resources or assistance might be required for communities, and also how they could monitor and evaluate performance of social forestry areas once established in terms of deforestation and poverty. This was particularly important since responsibilities for approving and monitoring CF areas was decentralized to provincial level. Each designated area was to include its own monitoring plan, but a joined up system across jurisdictions was needed, and lacking. This would require a simple, easy-to-use system, based on open-access datasets and reliable science, so that it could be easily administered and trusted.

Our evidence base and baselines were based on publically available data of forest cover change (Global Forest Watch; annually; indicator 1.4) and poverty change (Indonesia's PODES census; every 3-5 years; indicator 1.2), which we processed and mapped across >6,600 Kalimantan villages between 2000 and 2015. Rather than presenting simple changes since the baseline, we undertook a more rigorous spatial and temporal matching approach of existing CF areas alongside the deforestation data to evaluate what would have happened in the absence of CF in Kalimantan (and Sumatra) – i.e. a true counterfactual analysis. We found that by 2016 the total CF area of 2,200 km^2 in Kalimantan and Sumatra contributed to 17km^2 of avoided deforestation over the five years, but performance varied annually, and was particularly low during the 2015 drought event in SE Asia. Our main take-home message was that performance varies by biophysical circumstances, with CF areas established on peatland and close to agricultural settlements performing particularly poorly. We published this research in *Global Environmental Change* in 2017 (Annex 7.2.2), and presented this to stakeholders as part of Output 2.

The social data were more complicated because the government census information had rarely been applied for spatial monitoring due to difficulties aligning the data from year-to-year, and because of difficulties defining poverty. Therefore, while working to realign the census data, in year 2 we developed case-studies in the Kapuas Hulu and Ketapang regencies of West Kalimantan to identify suitable multidimensional poverty indicators (Figure 2), validate the national census information with detailed information from households, and establish baselines on the ground. We capitalised on FFI's experience of implementing poverty assessments in Indonesia and explored potential indicators already established via the *Nested Spheres of Poverty* (NESP) toolkit developed by CiFOR, who in 2006 undertook extensive consultation and field campaigns elsewhere in Kalimantan. Because NESP surveys had already been implemented in some areas, we could already track poverty change for a subset of villages with or without community forestry areas.

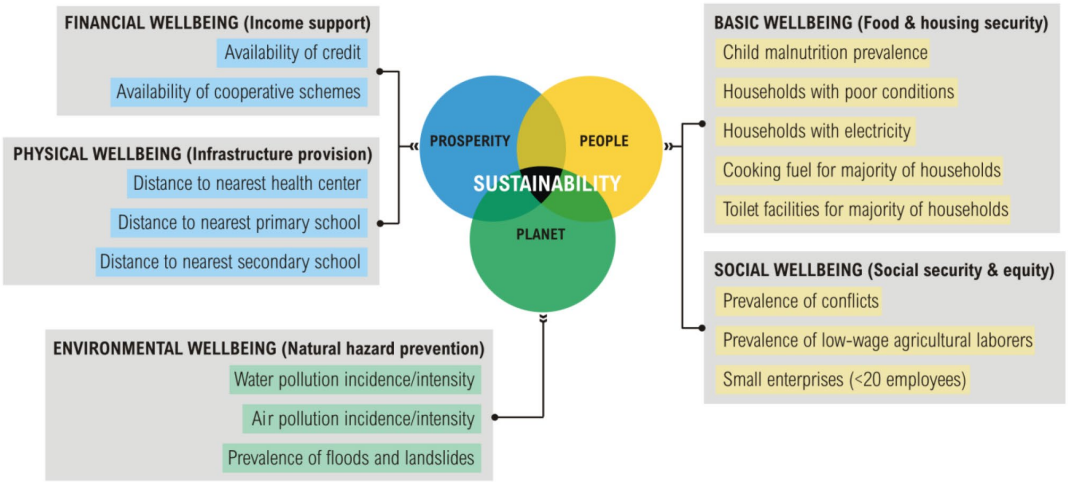

Figure 2. Multidimensional poverty indicators used in household surveys to assess wellbeing status in West Kalimantan villages with or without a *hutan desa* community forest scheme. Sixteen indicators were used spanning five aspects of well-being and the three central pillars of sustainability: prosperity, people, and planet.

FFI led household surveys of 8 villages, which were selected using poverty levels in past NESP surveys in 2011/12, the census data, and information on soils; 4 with a *hutan desa* scheme, and 4 control villages without (Indicators 1.5 & 1.6; see questionnaire and consent statements in Annex 7.1.6, 7.2.3):

Table. 1. Characteristics of villages visited as part of a case-study on poverty status in West Kalimantan. Household surveys (*n* refers to number of households sampled) were implemented in each village to compare villages with *hutan desa* to those without.

Regency	Village	Dominant Livelihood	Soil Type	Hutan Desa?
Kapuas Hulu	Menua Sadap (n=29)	Subsistence-based (swidden farming)	Mineral	Yes
	Riam Panjang (n=103)	Plantation outside concessions (mixed plantations, agroforestry)		
	Nanga Lauk (n=41)	Plantation outside concessions (mixed plantations, agroforestry)	Peat	Yes
	Tamao (n=32)	Subsistence-based (swidden farming)		
Ketapang	Laman Satong (n=213)	Plantation within oil palm concessions	Mineral	Yes
	Paoh Concong (n=88)	Plantation outside concessions (mixed plantations, agroforestry)		
	Pematang Gadung (n=160)	Other sectors (incl. horticulture, aquaculture, livestock, coastal fishing, commercial wet rice)	Peat	Yes
	Sungai Besar (n=252)	Plantation within oil palm concessions		Yes
	Sungai Pelang (n=276)	Other sectors (incl. horticulture, aquaculture, livestock, coastal fishing, commercial wet rice)		Yes
	Suka Damai (n=93)	Plantation outside concessions (mixed plantations, agroforestry)		

We found that although results from individual indicator questions were sometimes different between the two methodologies, the outcomes of PODES and NESP poverty assessments and direction of change between census points were broadly similar (see policy brief in Annex 7.2.5). A second peer-reviewed publication, describing both the poverty and deforestation outcomes of *hutan desa*, was published in May 2019 in the journal *People and Nature* (Indicator 1.2; Annex 7.3.2). We

found that in the 6 years *hutan desa* had been operating, the programme reduced poverty levels and deforestation overall (Figure 3). Importantly, this was against a background of poverty levels improving over time in Kalimantan (i.e. community forestry was associated with further improvements to poverty). However, *hutan desa* was associated with both reduced deforestation ***and*** poverty in just over half of cases. In other cases there were positive outcomes for forest conservation or poverty alleviation, but not both. Again, the benefits to people varied depending on where CF was established, and the underlying livelihood characteristics of villages in the vicinity, with peatland and industrial agricultural areas being particular prone to problems, resulting in deforestation and poverty worsening.

Land-cover data are presented on our project website and have been shared with government. Poverty data for 16 wellbeing indicators are too large to present on the website, but have been presented in policy briefs and distributed in training sessions (see Output 2).

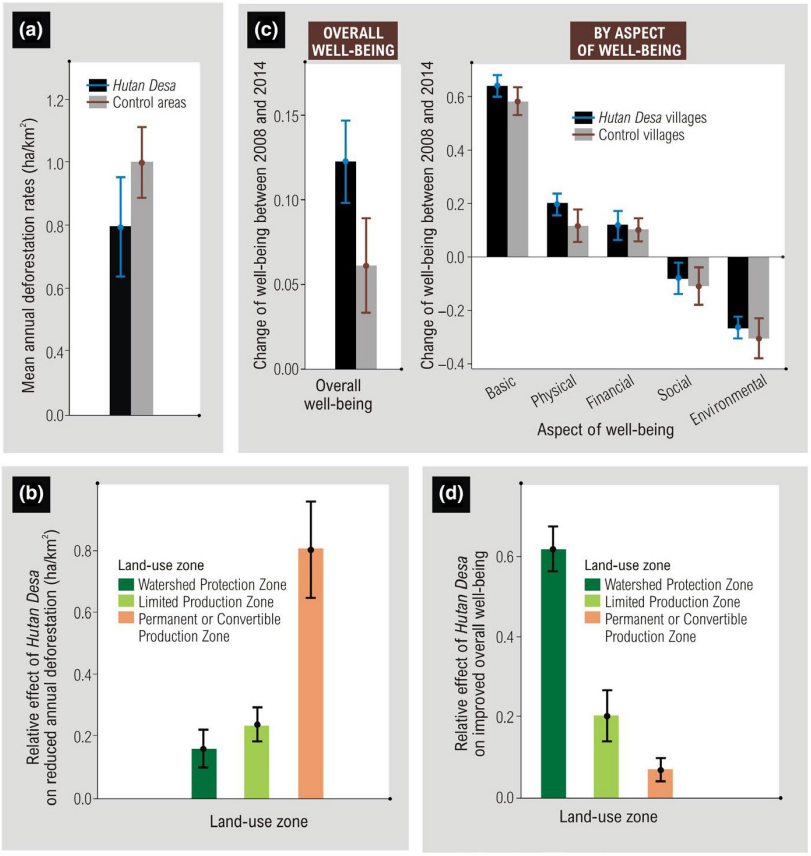

Figure 3. (a) Average annual deforestation rates between 2010 and 2014 inside *Hutan Desa* and in control areas, and (b) relative effect of *Hutan Desa* on reduced annual deforestation partitioned by land-use zone. (c) Average change in overall well-being and in different aspects of well-being between 2008 and 2014 in villages with and without *Hutan Desa*, and (d) relative effect partitioned by land-use zones. See Santika et al 2019 for further details.

Output 2 - CF guidance disseminated

To address the demand for simple guidance and monitoring techniques we developed a traffic light system that would indicate to decision-makers the relative levels of implementation risk versus likely benefits if CF was implemented well. The same system could be used to classify approved CF areas as 'high', 'moderate/average' and 'low' in terms of deforestation or improvement to poverty status several years after implementation and compared to the counterfactual status in non-CF areas. This system was presented to stakeholders in the West Kalimantan POKJA in 2016/17, and following positive feedback, it was used in subsequent policy briefs and dissemination activities at 5 workshops and governmental meetings in year 2 (more than originally planned, Table 2, Indicator 2.4).

Table 2. Summary of consultation workshops hosted under the MEPS project in 2017 and 2018 in order to disseminate information and seek feedback on monitoring methods for social forestry. See Annex 7.2.7 for reports.

Consultation on monitoring scheme applied at regency level (Indicators 2.1, 2.4)	**No. attendees receiving brief**		
	Gov't	**NGO**	**Total**
Ketapang regency, Borneo hotel, Ketapang (8-8-2017)	10	22	32
Kapuas Hulu regency, Andini hotel, Putussibau (10-8-2017)	16	12	28
Consultation on poverty assessments and monitoring methodologies at provincial level POKJAs (Indicators 2.3, 2.4)	**No. attendees receiving brief**		
	Gov't	**NGO**	**Total**
West Kalimantan, Orchardz hotel, Pontianak (21-3-2018)	20	16	36
Central Kalimantan, Grand Global hotel, Palangkaraya (27-3-2018)	24	9	33

The first two briefs (Indicator 2.1; Annex 7.2.4) described results of deforestation and poverty change analyses in Kapuas Hulu and Ketapang regencies of West Kalimantan, and introduced the simple traffic light scheme to local POKJA in West Kalimantan. These briefs were circulated in workshops and events hosted in West Kalimantan (Table 2). Based on feedback received, the third brief replaced the best practice guidelines originally proposed (Indicator 2.3; Annex 7.2.5) to describe the different methods available to document and monitor poverty in rural Indonesia.

Participants included representatives from provincial Social Forestry & Partnership (PSKL), Ministry of Environment and Forestry, Forestry Service, West Kalimantan province KPHs (forest management units), District government officials, District forum of Hutan Desa institutions, NGOs (e.g. Foreclim, Yayasan Palung, Troponbos, WWF and Aid Environment), and donor agencies (JICA in Ketapang, GIZ in Kapuas Hulu).

Our materials were well received (see reports in Annex 7.2.8), and participants were quite surprised that community forestry schemes could be monitored remotely in the ways promoted. Wildlife Impact followed up with some of these participants as part of our project's M&E report (see Annex 7.3.7). Semi-structured interviews were undertaken with 8 participants in 2018 and 10 in 2019. Interviews were conducted at least 6 months and up to 1 year following training attendance to gauge knowledge retention and implementation of learning. All respondents valued the MEPS project and the information and training they received from it. In 2018 all respondents planned to use MEPS information but had not done so yet, while in 2019, 50% of interviewees were using MEPS datasets, policy briefs, or toolsets/evaluation framework in their work, and 40% have not used MEPS yet but plan to do so as soon as they have collected the necessary data. All respondents felt MEPS helps government and regional officials or local communities to implement *hutan desa* (HD) and other social forestry designations, a 14% increase from the 2018, when 88% of respondents agreed that MEPS can help implementation of *hutan desa*. A key outcome of these workshops was a request to provide GIS training in the methods proposed to specialists within the main governmental organisations involved in community forestry, which we followed up in a workshop in year 3 (this is described further in Output 3).

The team were subsequently invited to present the material as part of the West Kalimantan delegation to the annual Governor Climate and Forest task Force meeting in Balikpapan East Kalimantan (policy briefs and associated publication included in 50 delegate conference bags). In addition LIPI partner Budiharta presented the deforestation analyses and proposed monitoring schemes at the national Tenure conference on forest and land reform in Jakarta (October 2017, Annex 7.2.7), which was attended mostly by NGOs (34 of 38 participants; including 22 women); thus maximising further dissemination beyond our target audience in Kalimantan.

As part of our Output 2 activities we generated a social network analysis to determine who the main actors were in community forestry implementation and how they were interlinked. The aim was to identify possible routes to success in community forestry, and to facilitate communication between stakeholders. MEPS member Friedman undertook a network analysis as part of her PhD study at UQ to better understand these linkages, and to determine how central they are to the performance of community forestry projects in Kalimantan. She interviewed community members in our case-study villages and the wider network in West Kalimantan together with FFI in November 2017 and February 2018. As well as being part of Friedman's PhD thesis, the work has been written up for publication and is currently in second review with the journal *Land-Use Policy* (Indicator 2.4; Annex 7.3.3). From the analyses undertaken it is evident that acquiring a hutan desa license is difficult without external input.

NGOs play a prominent role in the network of external actors in Ketapang regency (Figure 4). They are usually the nodes with most "influence" (i.e. high centrality scores in the network). Government entities are primarily serving an information providing function, and do not have much

direct interaction with communities compared to NGOs. In Kapuas Hulu, international aid organisations are more prominent than in Ketapang. There is considerable focus on initiating the process of community forestry permits, though in both Ketapang and Kapuas Hulu, it seems only one or two organisations dominate that role. Particularly during the implementation and support stages, some villages receive much more support in terms of the numbers of organisations present. There are also more organisations with community-oriented objectives playing supporting roles (e.g. connecting to markets, providing specific livelihood trainings), but some villages do not appear to have any longer-term support. Conservation NGOs tend to dominate the initiation and implementation stages of the process. Importantly, the network configurations also indicated significant cooperation among organisations in the early phase of the community forest process, but not in the later stages.

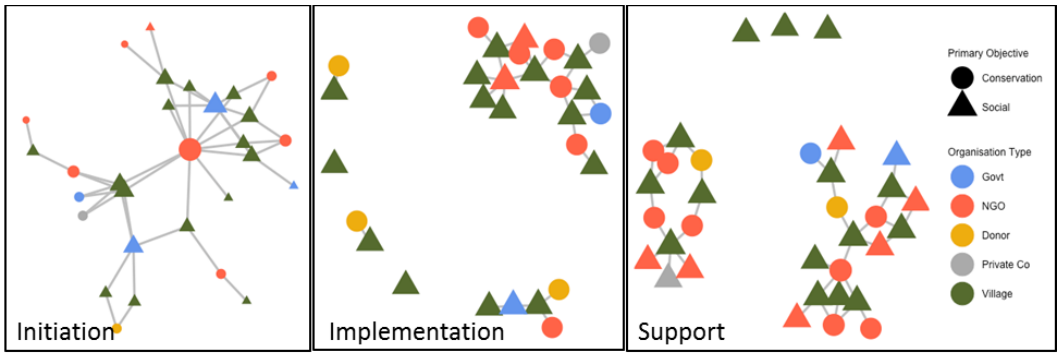

Figure 4. Network of all organisational actors active in community forestry initiation, implementation and support roles in West Kalimantan (villages in Ketapang and Kapuas Hulu combined). See Annex 7.3.3.

Throughout the project we intended to develop public outreach materials and measure media coverage to evaluate impact more broadly across Indonesian society. In September 2017 (Q3) we produced a commentary piece for Mongabay to coincide with our avoided deforestation publication. As of April 2018 (Mongabay have not returned readership statistics to us for 2019) this received 3,726 website page views from 2,399 website users, as well as 18,452 social media impressions from 367 social media engaged users (source: Mongabay.com). The article and research paper on which it was based were subsequently included within a review of community forestry that was published on Mongabay in November. This received even greater reach, particularly via social media: 23,609 website page views from 18,082 website users, as well as 546,821 social media impressions from 20,620 social media engaged users (source: Mongabay.com). However, our initial commentary pieces drew some criticism from colleagues in Indonesia. On one hand a human rights NGO viewed an article as largely negative on community forestry, reflecting their opinion of previous media releases by the team. On the other hand a logging enterprise viewed the article as overly pro community forestry (most likely because they are under pressure to relinquish 20% of logging land to community forestry across Indonesia). We therefore minimised further media releases, and concentrated efforts on tracking existing material and working with our target audience in Indonesian government.

Wildlife Impact reviewed change in stakeholder views on sustainable community forestry and the importance of the MEPS monitoring and evaluation framework via stakeholder interviews, media analysis and review of workshop questionnaire responses (Indicator 2.4; Annex 7.3.7). One hundred percent of stakeholders interviewed said addressing both poverty alleviation and deforestation are important components of CF. 2018 interviews showed the same percentages. There was a 20% increase from 2018 to 2019 in government representatives citing importance of using MEPS framework to match community forestry sites to community forestry goals. The number of interviewees who believed that monitoring and evaluation is important to the implementation and management of community forestry doubled from 50% in 2018 to 100% in 2019. 81% of media articles had a positive tone relative to conservation and/or poverty alleviation, an increase of 5% from 2018. GIS workshop questionnaire respondents showed increased strength of agreement that GIS plus forest cover and PODES data can be useful in monitoring and evaluating deforestation and wellbeing impacts, respectively.

Output 3 Increased governmental capacity to manage, monitor and evaluate CF land

We sought to training opportunities for government staff to ensure our evidence-base and guidance efforts translated into improved understanding of CF performance and capacity to implement meaningful monitoring and evaluation. We were unsuccessful in recruiting a suitably qualified government official for the postgraduate study due to insufficient English language scores from the applicants, and so recruited a student from FFI. Erlangga Muhammad graduated from DICE's MSc in Conservation and Rural Development in September 2018 and his research project tested the

application of the monitoring techniques we developed for Kalimantan to a CF case study in Jambi Sumatra (awarded 64%, Indicator 3.1, Annex 7.3.5).

Following feedback from earlier consultation activities (see Output 2) we hosted a four day GIS computer training workshop on the monitoring and evaluation techniques in Palangkaraya, Central Kalimantan in August 2018 (Indicator 3.2, Annex 7.3.6). Participants comprised 9 GIS officers from the PSKL provincial offices (2 staff each from West, Central, South, and East Kalimantan, and one from North Kalimantan), plus 2 higher ranked staff from the regional BPSKL office based in South Kalimantan who were in charge of certifying community forestry projects (including monitoring and evaluation performance). The training was led by Dr Truly Santika, and received good feedback (M&E report in Annex 7.3.7, Indicator 3.2). Ten of the 11 attendees (91%) of the 2018 GIS workshop participated in pre- and post-workshop questionnaires (Indicator 3.3, Annex 7.3.7). Respondents showed improved knowledge of the PODES dataset, use of GIS for community forestry evaluation, and the MEPS framework for monitoring and evaluating community forestry performance during post-workshop testing. Post-workshop questionnaires showed increased strength of agreement that GIS is important for CF implementation, and that GIS plus forest cover and PODES data can be useful in monitoring and evaluating deforestation and wellbeing impacts, respectively. Participants also placed increased value on the use of PODES data for proposing, implementing and evaluating CF.

To gather independent evidence concerning the impact of our engagement workshops on stakeholder perceptions about community forestry, environmental and poverty datasets, and the usefulness of our monitoring approaches, we commissioned Wildlife Impact to undertake stakeholder interviews with workshop participants in 2018 and 2019 (comparing years 2 and 3 of our activities, Indicator 3.3, Annex 7.3.7). Wildlife Impact were able to consult 8 participants from 2018 campaigns, and 10 from 2019. Interviews suggested 100% of government personnel who attended MEPS workshops understood causal relationships between CF impacts and land characteristics (no change on this question between 2018 and 2019). Understanding of MEPS datasets improved in all cases between 2018 and 2019: respondents stating MEPS provides valuable information increased 14%, from 88% in 2018 to 100% in 2019. In 2018, only 29% of respondents said the poverty datasets (PODES, NESP) data were helpful, while in 2019 50% felt these data were useful (an increase of 72%). In 2018 38% of interviewees said data on deforestation and degradation impacts were important, while in 2019 70% agreed these data were valuable (an increase of 84%). The number of respondents who believed that monitoring and evaluation is important to the implementation and management of community forestry doubled in 2019. Only 50% of 2018 interviewees felt that monitoring and evaluation was critical, while 100% of 2019 interviewees said monitoring and evaluation is very important to measure and improve community forestry outcomes.

3.2 Outcome

Our outcome was defined as:

"*Development of transparent decision-making processes for approving CFM applications and protecting forest, which meet environmental and poverty alleviation goals, incorporate evidence-based and participatory approaches, and can be replicated elsewhere*".

We set 4 indicators of achievement for this Outcome, which were revised following a Change Request in April 2019 – here we use the revised indicators pending a decision on the Change Request.

First, we commissioned Wildlife Impact to undertake independent interviews with government stakeholders involved in allocating and monitoring CFM areas to determine if CFM policies and practices had been approved (Indicator I). Most of these officials had participated in MEPS dissemination workshops and events, and some had been to multiple events or managed staff who had.

These interviews revealed 3 proposals on improved procedures for monitoring CFM had been made by government officials by the end of May 2019 (see M&E report, Annex 7.3.7):

1) The Regional Head of Social Forestry for West Kalimantan, Mr. Lazarus, suggested: *"[It] would be very useful to incorporate MEPS monitoring and evaluation into national regulatory framework. Right now the monitoring and evaluation framework depends on national level where policies are set that relate to overseas donor funding. There are now two different monitoring and evaluations systems – MEPS for impact and national for process. National focuses on how many hectares of social forest designated and how many hutan desa implemented. The Director General is interested in seeing if the two monitoring and evaluation systems can be merged"*

2) Mrs. Setiyo Haryani of West Kalimantan Forestry Department shared the MEPS research results and framework with the national Ministry of Forestry with the explanation that government partners FFI/MEPS had conducted evaluation in social forestry programme, which the government had reported: *"...They really appreciate this to know how social forestry can have impact. They really hope this can become a reference for other locations [in Indonesia] to do the evaluation".*

3) The Director General of Social Forestry and Environmental Partnerships, Bambang Supriyanto, has agreed to produce a "book" of MEPS analysis and guidance. The book on MEPS analyses and guidance is drafted and planned to be completed this calendar year, after which it would be disseminated to civil society.

Second, we sought at least 1 new/improved decision-making process, map or dataset from our project to be made available from local agencies to civil society. The Ministry of Forest and Environment committed to make its indicative area map, 'PIAPS', available to civil society in 2016: http://webgis.dephut.go.id:8080/kemenhut/index.php/id/peta/petapiaps

Our project datasets, guidance notes and recommendations are currently being reviewed by Director General of Social Forestry and Environmental Partnerships, and Mr Bambang Supriyanto will co-publish a book with us on this later this calendar year.

Third, we identified socially and environmentally appropriate areas as those within the Watershed Protection Zone in Indonesia's land-use planning system (see evidence for Output 1). Using information on allocated CFM areas in government maps we tracked the number of CFM areas and proportion of total extent approved in each zone. This was done before our project (up until 2015), during the project (2016-2018) and by the end of the project (2018/early 2019).

Although there is a reduction in the number of CFM areas approved in the Watershed Protection Zone over time, CFM is still being allocated there. Indeed 21% of those areas allocated to CFM in Kalimantan during 2018 were in this zone, which broadly reflects the amount of potential land suitable for CFM that remains on the island. More broadly, across Indonesia around 28% of all land eligible for CFM lies within this zone, and by the end of the project 28% of all approved CFM areas were allocated there (Annex 7.3.4). Thus, we are making some progress with this indicator, and will be in a good position to demonstrate achievement 2-3 years post project (especially after the book and guidance from Indicator II is disseminated).

Table 3. Distributions of community forestry allocations across 3 land-use zones for Kalimantan and the whole of Indonesia before the project (until 2015), mid-way through the project (2016-2018), and by the end of the project (actually end of 2018 as this is currently the latest data available). The number and proportion of areas is cumulative. The Watershed and Protection Zone is the most appropriate zone for CFM based on our spatial analyses in Output 1.

Region	Period	Watershed Protection Zone	Limited Production Zone	Permanent or Convertible Production Zone
Kalimantan	Until 2015	34 26.2%	34 26.2%	62 47.7%
	2016 - 2018	319 20.8%	297 19.4%	918 59.8%
	Until 2018	353 21.2%	331 19.9%	980 58.9%
Indonesia	Until 2015	475 43.6%	245 22.5%	369 33.9%
	2016 - 2018	2439 26.6%	3064 33.4%	3660 40.0%
	Until 2018	2914 28.4%	3309 32.3%	4029 39.3%

Fourth, we calculated the amount of deforestation avoided in CFM areas compared to non-CFM areas across Kalimantan. To do this we updated our counterfactual analyses of deforestation data published and disseminated for Output 1 to match the timeframe of our project. By 2019 the rates of forest clearance across CFM in Kalimantan was reduced by 8.7% compared to non-CFM areas of similar biophysical characteristics. This demonstrates that a sufficient amount of forest is being managed well as CF in socially and environmentally appropriate areas. This amount of avoided deforestation exceeds the target 5% set out in our log-frame.

Collectively performance against our 4 indicators demonstrates that our project delivered high quality outputs that meaningfully contributed to learning transfer and counterfactual evidence on CF impacts in Indonesia. Further, stakeholder interviews undertaken as part of our project M&E activities (see Annex 7.3.7) demonstrated positive perceptions and use of project information in implementing CF. All stakeholders interviewed in 2018 and 2019 said poverty alleviation and addressing deforestation are both important components of CF. The number of interviewees who believed that monitoring and evaluation is important to the implementation and management of CF doubled from 50% in 2018 to 100% in 2019. Half of interviewees are already using our information, and 90% plan to do so. Perception that our Darwin project was helpful to government and NGOs in planning, implementing and evaluating CF rose 14% between 2018 and 2019 (from 88% to 100%). Finally, the recent agreement of Director General of Social Forestry and Environmental Partnership (PSKL) of the Ministry of Environment and Forestry (KLHK) Bambang Supriyanto to produce a document on our project's findings with guidance on

applying lessons learned to CF implementation and suggestions for next steps is a strong positive indicator of successful uptake of MEPS findings by the government of Indonesia.

3.3 Impact: achievement of positive impact on biodiversity and poverty alleviation

Our stated impact statement was:

> *"Kalimantan's landscapes are sustainably managed to deliver social justice and ecological protection through improved understanding of the linkages between ecological systems and human wellbeing, resulting in improved governance".*

This sustainable management can be influenced by many factors, ranging from the activities and livelihoods derived from the landscape, to appropriate land-use planning and support systems by government and external actors. Given the scale of implementation committed by the national government (12 Mha by end of 2019) we focussed our project activities on the land-use planning aspects, targeting government and non-governmental stakeholders involved. MEPS research findings, project publications and capacity building provided at least 74 government staff with the tools necessary for careful decision making to maximize CF effectiveness in Kalimantan (Indicators 2.1, 2.3, 2.4, 3.2, 3.3). Stakeholder interview results, media analysis and the recent agreement of Director General of Social Forestry and Environmental Partnership (PSKL) of the Ministry of Environment and Forestry (KLHK) Bambang Supriyanto to produce a MEPS 'book' (document on MEPS research findings with guidance on applying lessons learned to CF implementation and suggestions for next steps) are strong positive indicators of successful uptake of MEPS findings at regional and national government levels.

All stakeholders interviewed as part of our independent M&E in 2018 and 2019 were interested in continued engagement with the project and further research and capacity efforts by MEPS. The M&E report, see Annex 7.3.7, concludes that a second phase of the project, especially now that the presidential election is over, would enable further dissemination and application (particularly in evaluating CF projects that have operated for 3 years or more) and would likely positively influence CF monitoring, evaluation, and management in the long-term. Based on the findings of this evaluation, we consider our Darwin project well placed to create lasting change in CF management, although, as noted in our M&E report, due to political realities and the challenges of covering such a geographically dispersed and culturally varied population, this change is likely to take time to propagate across all regional and national government levels and civil society.

Our project was specifically designed to help influence positive outcomes for poverty alleviation and human wellbeing in community forestry areas of Kalimantan. We found that the main scheme in Kalimantan, *hutan desa*, has already helped alleviate poverty overall, but there remain some contexts in which CF performs poorly and could actually exacerbate poverty (at least in the short term; Indicator 2.1). Having now mapped these conditions in Kalimantan (Annex 7.3.2) we are in a good position to promote where the most positive outcomes for people are likely to be. Should the local governments of Kalimantan follow this advice there could be substantial improvements over the next 5 years. Our next challenge is find out if these findings are scalable to other areas of Indonesia, where even greater improvements to human wellbeing can be achieved. This will form part of continuation work with the Ministry of Forestry and Environment following the release of our joint book later this year. We have also prepared a summary publication, which outlines this simple guidance to be tested in other parts of Indonesia (Figure 5, Annex 7.3.4).

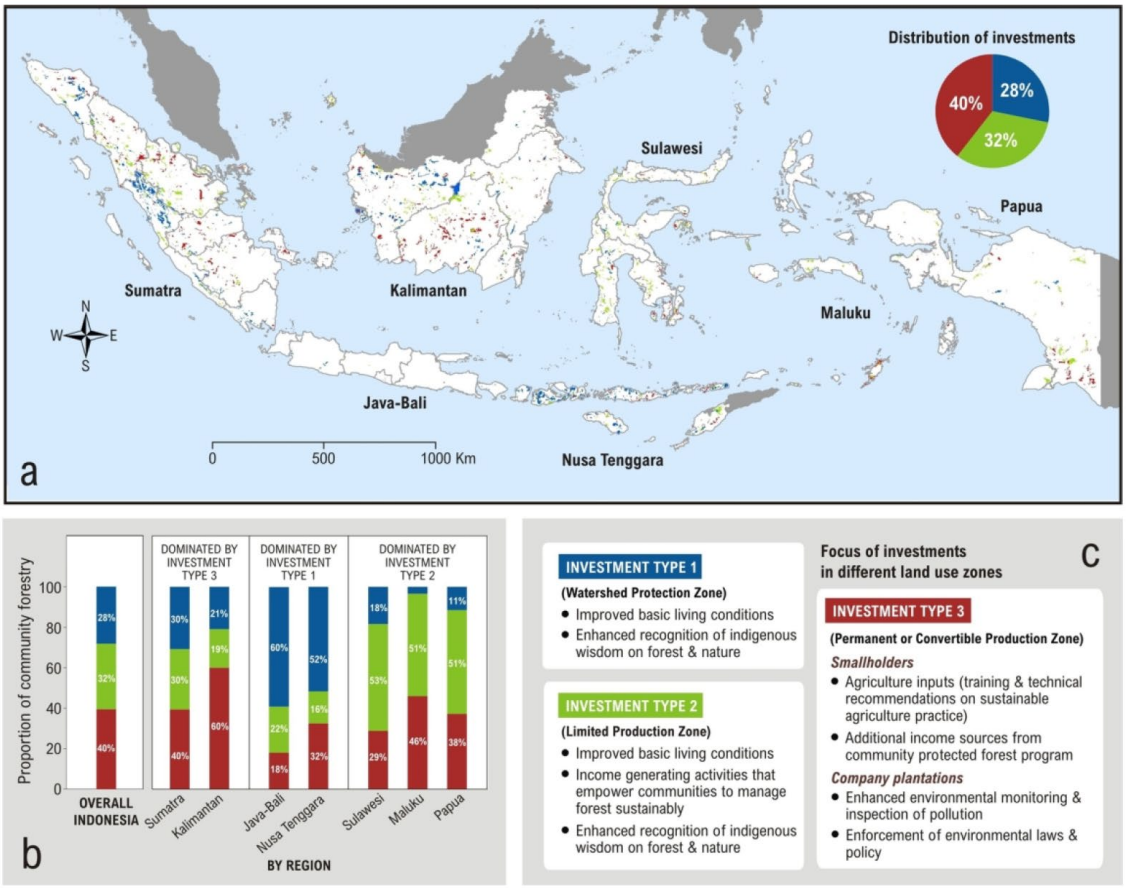

Figure 5. Example of a simple investment guidance based on state forest zones in Indonesia. Investment types 1, 2 and 3 are associated with the focus of investment for watershed protection zones, limited production zones, and permanent or convertible production zones, respectively. For each investment type we describe what projects could focus on to maximize environmental and social outcomes of community forestry. See draft manuscript for the open access journal Conservation Science and Practice in Annex 7.3.4 for further details.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Contribution to Global Goals for Sustainable Development (SDGs)

The MEPS project has made the most significant contributions to SDGs 1, 11 and 15:

SDG 1. No poverty. Especially indicator 1.B. Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

Outcomes of the MEPS project continue to influence the development of policy frameworks of community forest management, especially at the provincial level in Kalimantan (M&E report, Annex 7.3.7). We have established links between community forestry management and different aspects of poverty, and insights from research on the conditions under which community forest management has the most impact on poverty alleviation (Indicators 1.2,1.6, 2.2, 2.3). We found that community forests successfully improve human-wellbeing overall. However, wellbeing benefits are heterogeneously distributed across land-use zones, reflecting baseline community livelihood characteristics. Communities benefit the most in watershed protection zones where they typically rely on subsistence farming. In limited production zones where communities depend on logging, basic wellbeing is reduced due to restrictions on timber harvest. In permanent or convertible production zones where large monoculture plantations dominate, community forest has negative impacts on basic and environmental wellbeing; likely associated with pressure to intensify agriculture production due to land scarcity. Identifying consequences of forest protection on human-wellbeing and how this varies spatially is imperative to informing future policy design and the MEPS findings are set to be incorporated into monitoring performance of community forestry areas once they are allocated – as indicated by our planned coproduction of guidance materials with the Ministry of Environment and Forestry.

SDG 11. Sustainable cities & communities. Especially indicator 11.B. By 2020, substantially increase the number of human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, and resilience to disasters.

Community forest management provides rural communities in tropical geographies a greater say over the management of their lands, forests, waters and peatlands. One of the ideas behind promoting community forestry is that this greater participation of communities in the management and policing of forests will result in reduced deforestation, reduced greenhouse gas emission, and reduced loss of ecosystem services. MEPS research (Activity 1F, Annex 7.2.2, published in *Global Environmental Change*) found that indeed the *Hutan Desa* management scheme had successfully achieved avoided deforestation overall. Avoided deforestation performance, however, had been increasingly variable through time and across space with some land-use types performing much better than others. Especially extremely dry conditions during drought years pose challenges to *Hutan Desa* management, particularly on peatland, due to increased vulnerability to fire outbreaks. The MEPS project helped inform where and when the policies on allocating community forestry are most effective with respect to deforestation, and helped identify opportunities to improve policy implementation. This provided an important first step towards evaluating the overall effectiveness of this policy in achieving both social and environmental goals.

SDG 15. Life on land. Indicator 15. B. Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.

By re-allocating forest management responsibilities from the national government to the community-level, especially in areas such as watershed protection forests that previously received all but no management, CF can mobilize significant resources towards forest management. In Indonesia alone some 50,000 villages could potentially obtain forest management rights. Whether this management will result in more sustainable forest management depends on the quality of the governance processes, and level of technical and financial support from the government. The MEPS project helped maximize environmental and social benefits from community forestry by guiding the allocation of community forestry programmes and influencing the policies that are relevant to community forestry.

4.2 Project support to the Conventions or Treaties (CBD, CITES, Nagoya Protocol, ITPGRFA)

Indonesia is party to the CBD, and is committed to the Strategic Plan for Biodiversity 2011–2020, which has a mission to "take effective and urgent action to halt the loss of biodiversity. Thus, in cases where deforestation causes the loss of biodiversity, countries are committed to implementing responses to prevent this loss. The Strategic Plan for Biodiversity 2011–2020 encompasses 20 specific Aichi Targets. Many of these are directly relevant to effective implementation of community forestry management.

The MEPS project addressed several of the 20 Aichi Targets, thus helping the Indonesian government to formulate its CBD action plans. Examples include:

Target 2 requires integration of biodiversity values into development and poverty reduction strategies and planning processes. Our project informed policy-makers about the impact of community forest management on biodiversity, through the proxy measure of deforestation (Indicators 1.4, 2.1, 2.4).

Target 5 requires that rates of deforestation and other natural habitat loss are halved. MEPS studies have shown that the degree to which community forest management avoids deforestation is highly variable over space and time, but currently stands at 8.7% across Kalimantan (Indicator IV). By avoiding the allocation of community forest lands in areas with high risks of deforestation, the government of Indonesia can strategically reduce the likelihood of overall deforestation rates in Kalimantan and elsewhere in the archipelago.

Target 11 calls for equitable management of protected areas and other effective area-based conservation measures. Well-managed CFM areas can contribute to overall management effectiveness of protected areas because often these community forests are allocated in watershed protection areas (currently 21% of all CF areas in Kalimantan, and 28% across Indonesia, Indicator IV). Thus, effective community forest management can contribute to the target of 17% of land protected. The MEPS project helped this process by increasing understanding about the socio-ecological conditions under which community forest management is most likely to contribute to conservation area objectives.

4.3 Project support to poverty alleviation

We sought to assist the Indonesian government to monitor and evaluate the performance of community forest schemes themselves - which contributes to poverty alleviation, increased knowledge and capacity and sustainability for the project. We based our monitoring techniques on the government's own poverty data (PODES), which maximised government buy in, and helped to match data to international standards and protocols. Notably the indicators we selected cover more than just monetary benefits, and include financial, health, social and environmental aspects of poverty. The complementarity to other poverty assessment protocols is made clear in the supplementary materials of our recent publication in *People*

and Nature, where we have matched our poverty indicators to those used in the Multidimensional Poverty Index, the Sustainable Livelihood Approach, and the Nested Spheres of Poverty toolkit.

4.4 Gender equality

We do not expect any direct gender equality impacts of the project as this was not specified within our stated aims, or was considered to be a challenge at the outset in Indonesia. The distribution of benefits of our project is expected to be equal between women and men as women's rights are relatively strong in Indonesia. We sought a gender balance on our team (equal, 5 women; 5 men), and sought fair representation of both genders at our consultation meetings to allow equal contribution of ideas, although these events have typically been attended by more males (Annex 7.3.7).

4.5 Programme indicators

- **Did the project lead to greater representation of local poor people in management structures of biodiversity?**

  Not specifically addressed by our project. However, as the extent of CF areas increased over Kalimantan during the project more local people have the tenure rights to forest land and are responsible for managing that forest estate in part for biodiversity.

- **Were any management plans for biodiversity developed and were these formally accepted?**

  Our project targeted the land-use planning component of effective biodiversity management. By the end of our project 21% of all community forest areas in Kalimantan were designated in environmentally appropriate areas (i.e. with highest potential biodiversity outcomes from forest protection). These areas were approved partly on the basis of their management plans, which included components on sustainable forest management by local communities.

- **Were they participatory in nature or were they 'top-down'? How well represented are the local poor including women, in any proposed management structures?**

  Management plans were drawn up by communities with assistance from outside actors (Activity 2F, Annex 7.3.3). We do not have access to these plans to comment further.

- **How did the project positively influence household (HH) income and how many HHs saw an increase?**

  We did not measure household income as this is often a weak indicator of poverty and wellbeing.

- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

  We did not measure household income as this is often a weak indicator of poverty and wellbeing.

4.6 Transfer of knowledge

Knowledge transfer was a large component of our project (see description of Output 2 above). One person was trained to postgraduate level in Conservation Biology and Rural Development, and a further 11 GIS specialists were trained in our monitoring and evaluation techniques; all Indonesian. These GIS specialists were all male, although we made efforts to seek a better gender balance. Overall, MEPS research findings, project publications and capacity building provided at least 74 government staff with the tools necessary for careful decision making to maximize CF effectiveness in Kalimantan (Indicators 2.1, 2.3, 2.4, 3.2, 3.3).

4.7 Capacity building

In recognition of his expertise on community forestry through this project FFI staff Kusworo (male) was seconded to The Nature Conservancy to help with a community forestry partnership there. He returned to FFI in early 2019. The FFI team, as well as Borneo Futures staff Meijaard (all male), were invited to discuss the MEPS approaches with the World Bank in October 2018 ahead of a tendering process to fund related projects in Indonesia. Earlier, in year 2, FFI staff were asked to lead a session on forest conservation in community forestry in Indonesia's national Tenure conference in Jakarta. Hutabarat was promoted at FFI in 2018. Struebig and St. John were both promoted to Reader in Conservation at Universities of Kent and Bangor respectively in 2019.

5 Sustainability and Legacy

Our stakeholder interviews (Annex 7.3.7) demonstrate positive perceptions and use of MEPS information in implementing community forestry in Kalimantan. 100% of government stakeholders interviewed in 2018 and 2019 said poverty alleviation and addressing deforestation are both important components of CF. The number of interviewees who believed that monitoring and evaluation is important to the implementation and management of community forestry doubled from 50% in 2018 to 100% in 2019. Half of interviewees in government are already using MEPS information, and 90% plan to do so. All stakeholders interviewed in 2018 and 2019 were interested in continued engagement with the project and further research and capacity efforts by MEPS.

A second phase of the project, especially now that the presidential election is over, would enable further dissemination and application (particularly in evaluating CF projects that have operated for 3 years or more) likely to positively influence CF monitoring, evaluation, and management in the long term. Based on the findings of this evaluation, we consider MEPS well placed to create lasting change in CF management in Indonesia, although due to political realities and the challenges of covering such a geographically dispersed and culturally varied population, this change is likely to take time to propagate across all regional and national government levels and civil society.

All staff remain in post, with the exception of Wilson who moved institution to Queensland University of Technology, and Friedman who will shortly complete her PhD study at UQ.

6 Lessons learned

6.1 Monitoring and evaluation

Major changes:

Our original logframe included an additional component to use datasets collated to map where Protection Forest (a land-use designation for watershed protection) should have been designated according to Indonesian law. The criteria and datasets used in Indonesia are vague and questionable, which could have major implications for land-use planning, including social forestry allocations. Having undertaken the assessment in year 1, we found significant mismatch between the total area legally allocated for protection over Kalimantan versus the area expected from our analyses – much more land was allocated for this protection purpose than should have been following the actual criteria. Although we reported on this in year 1, we limited dissemination of the controversial findings in order to not confuse the allocation of CF. Darwin Initiative subsequently agreed to this component being withdrawn from the project.

M&E system:

We contracted our M&E to an external third party – Wildlife Impact - in order to assure some independence in the evaluation. Doing so helped us provide additional evidence of progress towards achieving our project Impact and Outcome objectives, which otherwise might appear weaker with the indicators and means of verification we outlined in our proposal. Wildlife Impact evaluated the project against the indicators in our logframe as well as key questions on project effectiveness (achievements), impact (outcomes), efficiency of delivery, appropriateness (suitability to local conditions) and legacy (long term impacts). The report (Annex 7.3.7) concludes:

1. The project delivered high quality research that met output goals and meaningfully contributed to south to north learning transfer and counterfactual evidence on community forestry (CF) impacts.
2. MEPS workshops built capacity and shared tools to better plan and evaluate CF projects. Research, communication, and capacity building activities were well received by stakeholders (100% of interviewees said MEPS provided valuable information).
3. Nearly all (90%) of stakeholders interviewed would like to receive additional research, datasets, and capacity building from the MEPS team.
4. By the final year of the project, public statements increasingly demonstrated MEPS-relevant messaging and understanding of MEPS data and framework
5. Work was both efficient and appropriate. The project legacy appears positive given government interest in adopting the MEPS monitoring and evaluation framework and their appetite for a second phase of the project, and in MEPS' assistance in evaluating CF projects that have operated for 3 years or more.

We also note the following points for improvement on our original log-frame and M&E plan:

- Media analysis indicators were not very useful as a measure of project uptake since the project didn't promote specific messaging points to the media (we reduced our media engagement after

activities in year 1 prompted criticism from some NGOs). However these indicators were interesting as a gauge of national mood and specific areas of interest in CFM.

- Stakeholder statements in media were likewise not a good MEPS specific indicator as they were tied to the article topics which were driven by forces outside the control of the project. Had there been a media campaign these would be a good way to gauge if stakeholders actually carried our messaging in the press.
- The pre- and post-workshop questionnaires were overall not particularly valuable for gauging knowledge gain and perception change as they were not applied consistently throughout the project. This reflects that our objectives shifted towards targeting monitoring and evaluation methods rather than CF allocation decisions per se, and so the questions inevitably changed in this process. The exception is the GIS workshop in year 3 (Indicators 3.2,3.3) for which we were able to convincingly track perceptions before and after the event.
- Stakeholder interviews more or less filled the gap from pre-post questionnaires. This is why we kept a question on how land use designations impact success of CFs as that showed whether people remembered what they learned from the first round of workshops. We also were able to note interviewees' spontaneous comments relating to MEPS research results and their application.

6.2 Actions taken in response to annual report reviews

All partners have had opportunity to provide input for this final report. We received 4 comments on our last annual report that required a response here:

1. *The project should comment on the suitability of its exit strategy.*
   By end of project we had provided at least 74 government staff with the tools necessary for careful decision making to maximize CF effectiveness in Kalimantan. The Director General of Social Forestry and Environmental Partnerships, Mr Bambang Supriyanto, has agreed to coproduce a book of MEPS analysis and guidance with us, and this planned to be completed by the end of 2019. In principle, government evaluators will then be well-placed to monitor and evaluate CFM areas using the datasets provided. However, it remains to be seen whether our findings for *hutan desa* in Kalimantan scale up to other parts of Indonesia with other schemes and operational contexts. We are seeking further funding to support us to address these questions together with the government. Because Indonesia is decentralized we will need to engage with additional regional working groups, but this should now be easier now that we have good working relationships with stakeholders in Kalimantan.

2. *The project has highlighted it will 'seek a better balance in future media articles. It would be useful if the project could comment on how this has been achieved.*
   We avoided targeting media for events or promotional messaging on community forestry topics altogether. However, following our publication in *People and Nature* we produced a plain-language summary, and complemented this with a twitter thread in English and Bahasa Indonesia. These threads contributed 3956 impressions, 158 engagements and 51 media engagements (i.e. accessing the publication) within 7 weeks, by 26/6/2019.

3. The project has changed its name, rebranding the project as MEPS, Is the project able to comment on how this has impacted its Darwin Identity. Are there any direct or indirect implications from this?
   We believe rebranding as MEPS helped distinguish our work from the contributing partners, and hence enhanced Darwin identity (which has always been promoted on materials, events and communications). The project became something more than FFI or LIPI in Indonesia, or DICE, UQ or Borneo Futures internationally.

4. The project has not specifically commented on its progress towards impact and should do so.
   See section 3.3.

7 Darwin identity

MEPS is a distinct project among the five partners involved, and has always been introduced as one supported by the UK government in collaboration with partners from Indonesia, Australia, Brunei and UK. We rebranded the project as 'MEPS' as a memorable acronym (think 'maps'!) independent from each of the partner institutions. Nevertheless, the Darwin logo has been prominent on all dissemination materials, including talks and banners, questionnaires, policy briefs, media campaigns, the website and

peer-reviewed outputs. In August 2018 (year 3) most of the team presented MEPS-related talks at the Association for Tropical Biology and Conservation international conference in Sarawak Malaysia, at which Darwin was consistently acknowledged at the start and end of each talk. In response to feedback on our year 2 report, we have taken steps in our final year to improve the website's multi-language functionality.

Project team member social media accounts, primarily on Twitter, linked to project publications and discussed project data as well as linking back to @Darwin_Defra. This media activity has helped disseminate MEPS data and knowledge of community forestry impacts within scientific and conservation communities, and has helped to expand the reach of existing earned media (Altmetric.com 2019; Mongabay.com 2018).

8 Finance and administration

This section seeks information about the finances of your project **since your last annual report**. Please amend the financial years in the tables to suit the reporting period and add/remove rows in the sub-tables if necessary. If all receipts have not yet been received, please provide indicative figures and clearly mark them as Draft. The Actual claim form will be taken as the final accounting for funds.

8.1 Project expenditure

To be updated for year 4 by Kent Finance after end of project July 2019

Project spend (indicative) since last annual report	2018/19 Grant (£)	2018/19 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			0.11	
Consultancy costs			15.62	Includes M&E
Overhead Costs			0.00	
Travel and subsistence			-9.89	
Operating Costs			-0.74	
Capital items (see below)			0	
Others (see below)			23.14	
TOTAL				

Staff employed (Name and position)	Cost (£)
J Hutabarat	
T Indrawan	
M Struebig	
F St John	
E Meijaard	
K Wilson	
TOTAL	

Capital items – description	Capital items – cost (£)

TOTAL	

Other items – description	Other items – cost (£)
IS Web Solutions MEPS maps FFI – Stationery, postage & miscellaneous office supplies Maintenance payment for Kent student Erlangga Muhammad 5 Bank Fees incurred (£2.00 each time) for payments to overseas partners	
TOTAL	

8.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
Arcus Foundation salary, E. Meijaard	
The Woodspring Trust, K. Wilson	
TOTAL	

Source of funding for additional work after project lifetime	Total (£)
TOTAL	

8.3 Value for Money

Our achieved Outputs and Outcome notwithstanding, we consider our project great value for money in two main ways:

First, we established strong partnerships for delivering the project (pooling resources, using local knowledge and experience)

- We formed an additional partnership (FFI) to provide key local staff with relevant experience.
- Finding a government staff person as a DICE MSc candidate was not workable, but we were able to find an NGO staff person to pursue this opportunity.

Second, we responded to lessons learned along the way (particularly M&E), which improved efficiency:

- Prior to the mid-term evaluation, we adjusted data collection and contracted an Indonesian translator (Nurbaniyara) to conduct stakeholder interviews to address what we anticipated would be a lack of available data to analyse stakeholder uptake of project findings. We also addressed the demand for additional training on spatial analysis, and adjusted communication plans to focus on direct communication with stakeholders, all while staying within the project budget.

Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Kalimantan's landscapes are sustainably managed to deliver social justice and ecological protection through improved understanding of the linkages between ecological systems and human wellbeing, resulting in improved governance. (Max 30 words)			
Outcome: Development of transparent decision-making processes for approving CFM applications and protecting forest, which meet environmental and poverty alleviation goals, incorporate evidence-based and participatory approaches, and can be replicated elsewhere. (Max 30 words)	(I) At least one new or improved policy/procedure for allocating and/or monitoring land for CFM is proposed by local government by end of project and incorporates specific findings, including datasets, from this project. (II) At least one new/improved decision making process, map or dataset developed by the project (e.g. Outputs 1.1-1.4, 1.6, 2.1, 2.3) is made available from local agencies to civil society via government-endorsed maps/websites (yr 2, 3). (Only the indicative map of CFM applications under review in 2015 is currently available). (III) By the end of project, at least one CFM area is approved in a socially and environmentally appropriate area in West Kalimantan	(I) Independent interviews with government stakeholders involved in allocating and monitoring CFM areas: Social Forestry and Environment Partnerships (PSKL, Perhutanan Sosial dan Kemitraan Lingkungan), and provincial and district-level working groups in Kalimantan (Pokja-PPS, Kelompok Kerja Percepatan Perhutanan Social). This will include reference to key project outputs: 1.1-1.4, 1.6, 2.1, 2.3. (yr 2 & 3). (II) Content analysis of government-endorsed maps and datasets publically available via website(s) (yr 2, 3). (III) Baseline lists of communities with CFM applications; maps of potential CFM areas (mo 12); comparisons of social and environmental data from year 1 and 3 (and 3 years later) in case study locations (yr 3); peer-reviewed	Support obtained from listed government institutions for involving their staff at our proposed national and local workshops. Indonesia remains a democratic country committed to its stated goals on poverty alleviation, respect for human rights and sustainable development, and is willing to implement policy changes to achieve these goals. Legal reform does not proceed until consultation and interrogation of scientific evidence has taken place. The Ministry of Environment & Forestry remain consistent in achieving their target of allocating 13 million ha state forest for community forestry (so far only ~0.6 million ha has been granted).

	(IV) By end of project, the rate of forest clearance by local communities in CFM areas across Kalimantan is reduced by at least 5% compared to non-CFM areas of similar biophysical and geographical characteristics.	publications in open-access journals (yr 3). (IV) Forest cover change assessment, and analysis of publically-available fire hotspot data 2000-2018 (yr 3)	

Outputs: 1. A robust evidence base (including a pre-intervention baseline) available to assess CFM applications, and monitor/evaluate consequences on human livelihoods and the environment (mo 1-15)	1.1 Kalimantan-wide spatial data produced of biodiversity provisions, ecosystem functions and other environmental characteristics relevant to land-use planning and evaluation of CFM applications and 'Protection forests' (mo 9).	1.1 Kalimantan-wide maps of key environmental data in GIS format and summary documents made open-access via dedicated website (mo 9).	Central Agency for Statistics (BPS) is willing to share poverty indicator and occupational data at the village-level resolution, and more broadly sees the value in incorporating scientific evidence. NB: such data are commercially available so we see no restriction. We have already acquired data for 2014 and are in process of requesting previous assessments.
	1.2. Kalimantan-wide village level databases collated of poverty indicators from Central Agency on Statistics national census (e.g. household income, non-food expenditure); baseline data describing social perceptions on land-use (previously collected by Meijaard and spatially modelled across Kalimantan) partitioned by village and linked to these data (mo 9).	1.2 Kalimantan-wide maps and summary statistics for social perception, forest dependency and poverty indicator data (from the BPS Central Agency on Statistics) (mo 9)	Community leaders permit locality information for their CFM areas to be shared NB: formal consent will be sought; option to share information at low spatial resolution.
	1.3 Kalimantan-wide spatial database of existing and proposed CFM areas so that potential synergies and conflicts between CFM and protective land-uses can be identified (mo 12,24,36).	1.3 CFM applications monitored annually, reported to Darwin and stakeholders, and shared with online map sources (e.g. www.brwa.or.id/sig; www.landmarkmap.org) (mo 12,24,36)	Local communities in case study and control areas are willing to be interviewed and help identify and collate multidimensional poverty indicators capital asset data. NB: we will foster existing partnerships between local communities, district and provincial forestry services and other NGOs (e.g. CIFOR & FFI in Kalimantan)
	1.4 Kalimantan-wide annual deforestation rate using freely available Landsat imagery, estimates 2000-2015 as baseline (mo 6).	1.4 Deforestation statistics communicated in annual report and on project website. (mo 12,24,36)	
	1.5 Confirmation of at least 4 CFM case-studies involving village heads and local communities in West Kalimantan by mo 12.	1.5 Letters of intent from village heads from the 4 case-study areas in East and West Kalimantan (mo 12).	
	1.6 Case-study village visits for participatory workshops with local communities to identify multidimensional poverty indicators (e.g. health, empowerment, trust, access to	1.6 Year 2 project report (mo 24); in Year 3 a manuscript (e.g. 'Socio-economic and ecological performance of CFM in Indonesia: evidence from Kalimantan') submitted to peer-reviewed open-access journal (mo 15)	

2. Guidance on CFM assessment from 'Output 1' widely disseminated amongst government and non-governmental stakeholders, and contributing to increased advocacy and new CFM development in West Kalimantan (mo 15-36).	2.1 Policy brief produced based on key project outputs (i.e. 1.1-1.4, 1.6, 2.1, 2.3 in mo 15; updated with 1.3, 1.5 in mo 30). Presented and circulated to government agencies and relevant mechanisms (e.g. Ministry of Environment and Forestry, CBD, National Peatland Restoration Body). Also available on project and associated websites (mo 15, updated mo 30; 200 copies per year). 2.2 Three facilitators trained in CFM policy, planning processes and how to use key project datasets (mo 18). 2.3 Best practice guidelines based on case-studies (see 1.6) printed and disseminated to at least 25 governmental and non-governmental organisation (NGO) personnel (e.g. local planning offices, CIFOR, FFI Indonesia, Indigenous Movement Alliance/AMAN) at dedicated workshops in Kalimantan (mo 24; 200 copies). 2.4 Two stakeholder consultation workshops in Kalimantan (Ketapang and Kapuas Hulu regencies) to present datasets and guidelines, garner feedback, and generate CFM social network analysis to facilitate communication between government and non-governmental (mo18). At least a 20% increase from previous year in NGOs citing importance of sustainable CFM in national media (e.g. newspapers, conferences, websites) between months 18 & 36. At least a 10% increase in government representatives citing the importance.	2.1 Policy briefs available at national and international meetings. Google analytics of project websites and those of governmental ministries (e.g. Ministry of Land & Spatial Planning) (yr2,3). 2.2 Minutes and entry/exit questionnaire testing understanding of planning processes in Jakarta training workshop for the three facilitators (mo 20) 2.3 Guidance materials in Bahasa Indonesia and English. Number of copies disseminated (mo 24). 2.4 Entry/exit questionnaire from stakeholder workshops in Kalimantan (will also serve as baseline for Output 3.3). Annual report on workshop outcomes. Manuscript (e.g. 'A social-network analysis of the CFM planning process in Indonesia: actors, perceptions and effectiveness of environmental policy') submitted to peer-reviewed open-access journal (mo 15). Media reports (press releases and opinion pieces in Indonesia newspapers) and meeting minutes monitored and reported annually (mo 24 & 36).	The chosen formats are useful to target audience, especially decision-makers.

3. Increased understanding and capacity to transparently manage, monitor and evaluate land for CFM and 'Protection Forest' status within government (yr3).	3.1 One professional relevant to the CFM process is educated to MSc level, trained in spatial planning (using datasets outlined in Output 1) and workshop facilitation (mo30). 3.2 At least 17 government staff trained in use of datasets and evidence-based planning techniques at workshop in Jakarta (3 from each Ministry of Spatial Planning, Forestry & Environment, Agriculture, and Finance in Kalimantan and 1 from each in Jakarta, plus national representative from the Ministry of Female Empowerment to ensure gender is implicit in the participatory design) (mo32). 3.3 Change in perceptions and understanding of environmental/poverty datasets as well as causal relationships between CFM policy and consequences among the trained government personnel between workshops in years 2 and 3. Specific indicators based on key information in guidance outputs produced via 2.1 and 2.3. Baseline perceptions established during year 2 workshop as part of Output 2.4 (mo 18 & 32).	3.1 MSc awarded at University of Kent; thesis presented to government (mo30). 3.2 Training materials, presentations and reports from workshops in Kalimantan and Jakarta (mo18, 32). 3.3 Perceptions/understanding/beliefs recorded via questionnaires in sequential government workshops (i.e. mo 32 Jakarta workshop compared to mo18 Kalimantan workshop baseline from previous year), targeting understanding of key messages from policy brief (2.1) and best practice guidelines (2.3). Questionnaires will be embedded within a measurable learning exercise across the two workshops: first stakeholder visions/beliefs/mind-sets are articulated; extant beliefs recorded; then new knowledge is introduced (i.e. from Outputs 1 & 2); then changes to beliefs recorded. Further verification via post-workshop assessment and stakeholder consultation feedback (mo18, 32).	Appropriate government staff are available to participate in capacity building activities and retain their roles during the course of the project. Staff respond positively to the ChaRL approach and provide feedback on the participatory modelling process. This approach has been trialled for land-use planning decision-making elsewhere in Kalimantan and was positively received, indicating that it is the ideal framework to use in our context.

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.A, 1.B and 1.C are contributing to Output 1)

1A Project team inception meeting amongst key team personnel in Jakarta to confirm framework for project management, monitoring and reporting and to begin the process of identifying and collating the relevant data.

1B Meeting at start of project in Jakarta with key personnel within national government ministries (1-2 from each Ministries of National Development Planning (BAPPENAS), Land and Spatial Planning (BPN), Agriculture, Forestry & Environment, plus representative from the newly formulated Ministry of Female Empowerment to ensure gender is implicit in the participatory design) and relevant non-governmental organisations (e.g. CIFOR, FFI Indonesia), to identify evidence-base required for subsequent analyses.

1C Collate Kalimantan-wide baseline spatial data on environmental attributes identified above (e.g. biodiversity levels, forest cover, watersheds, other ecosystem functions) and poverty indicators (e.g. capital assets from latest national census in 2015; social perceptions from previous study), that are pertinent to allocating CFMs.

1D Update maps of proposed and allocated CFMs from government sources; update of Kalimantan-wide database.

1E Update baseline deforestation estimates since 2000 using forest cover data available after the 2015 forest fires.

1F Prepare publications: Socio-economic and ecological performance of CFMs in Indonesia: evidence from Kalimantan' (target: *Conservation Letters or Human Ecology*).

1G Site visits and participatory workshops in 4 CFM case study villages (2 in East, 2 in West Kalimantan) to develop case studies to inform government guidance documents (in part using social network analysis - see also activity 2.4), and also identify and rank baseline multidimensional poverty indicators.

2A Produce policy brief on environmentally and developmentally appropriate CFM allocation and circulate to relevant national mechanisms (e.g. CBD focal point, Indonesian REDD+ Taskforce), and make freely available on project website.

2B Train 3 facilitators in CFM policy and planning options at a dedicated workshop in Jakarta (mo20).

2C Produce guidelines of best practice based on the 4 case studies and circulate to governmental agencies and non-governmental organisations.

2D Develop public outreach through press releases, opinion pieces and social media. Measure amount of coverage generated in targeted media (e.g. Jakarta Globe, Jakarta Post, Tempo, Twitter feeds) before and after media campaign.

2E Two stakeholder consultation workshops (one each in East and West Kalimantan) with local governmental and non-governmental organisations, and indigenous groups, to present the case for appropriately allocated CFMs and 'Protection Forest', introducing the case studies identified and presenting Kalimantan-wide baseline data. Also to glean feedback on guidelines document, recruit MSc candidate and record beliefs and mind-set information via pre and post-workshop questionnaires for monitoring.

2F Undertake social network analysis linking local communities in case study areas with governmental and non-governmental stakeholders in CFM allocation. Subsequent manuscript (e.g. ‘A social-network analysis of CFMs in Kalimantan, Indonesia: actors, perceptions and effectiveness of environmental policy’) submitted to peer-reviewed open-access journal (mo 15).

3A Postgraduate training of a government planning staff on DICE's MSc Conservation & Rural Development.

3B Stakeholder workshops, with governmental and targeted non-governmental organisations, to train in planning techniques, and evaluate change in perceptions. Press briefing linked to workshops via LIPI communications team.

3C Measure changes in environmental and poverty indices used and disseminated to government via stakeholder workshop and to NGOs via media/website (annual meeting ahead of Darwin report).

3D Measuring of perceptions and changes to beliefs/mind-sets among government personnel.

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements
Impact: Kalimantan's landscapes are sustainably managed to deliver social justice and ecological protection through improved understanding of the linkages between ecological systems and human wellbeing, resulting in improved governance.		Our research findings, project publications and capacity building provided at least 74 government staff with the tools necessary for careful decision making to maximize CF effectiveness in Kalimantan (Indicators 2.1, 2.3, 2.4, 3.2, 3.3). Stakeholder interview results, media analysis and the recent agreement of Director General of Social Forestry and Environmental Partnership (PSKL) of the Ministry of Environment and Forestry (KLHK) Bambang Supriyanto to produce a MEPS 'book' (document on MEPS research findings with guidance on applying lessons learned to CF implementation and suggestions for next steps) are strong positive indicators of successful uptake of MEPS findings at regional and national government levels. All stakeholders interviewed as part of our independent M&E in 2018 and 2019 were interested in continued engagement with the project and further research and capacity efforts by MEPS. The M&E report, see Annex 7.3.7, concludes that a second phase of the project, especially now that the presidential election is over, would enable further dissemination and application (particularly in evaluating CF projects that have operated for 3 years or more) and would likely positively influence CF monitoring, evaluation, and management in the long-term.
Outcome Development of transparent decision-making processes for approving CFM applications and protecting forest, which meet environmental and poverty alleviation goals, incorporate evidence-based and participatory approaches, and can be replicated elsewhere.	(I) At least one new or improved policy/procedure for allocating and/or monitoring land for CFM is proposed by local government by end of project and incorporates specific findings, including datasets, from this project.	(I) See project M&E report for detail. 3 proposals on improved procedures for monitoring CFM have been made by government officials: 1) regional Head of Social Foresty for West Kalimatan Province, Mr. Lazarus, suggested: *"[It] would be very useful to incorporate MEPS monitoring and evaluation into national regulatory framework. Right now the monitoring and evaluation framework depends on national level where policies are set that relate to overseas donor funding. There are now two different monitoring and evaluations systems – MEPS for impact and national for process. National focuses on how many hectares of social forest designated and how many hutan desa implemented. The Director General is interested in seeing if the two monitoring and evaluation systems can be merged"* 2) Mrs. Setiyo Haryani of West Kalimantan Forestry Department province shared the MEPS research results and framework with the national Ministry of Forestry with the explanation that gov't partners FFI/MEPS had conducted evaluation in social forestry program, which the gov't reported: *"...They really appreciate this to know how social forestry can have impact. They really hope this can become a reference for other locations to do the*

Project summary	Measurable Indicators	Progress and Achievements
		evaluation". 3) The Director General of Social Forestry and Environmental Partnerships, Bambang Supriyanto, has agreed to produce a "book" of MEPS analysis and guidance.
	(II) At least one new/improved decision making process, map or dataset developed by the project (e.g. Outputs 1.1-1.4, 1.6, 2.1, 2.3) is made available from local agencies to civil society via government-endorsed maps/websites (yr 2, 3). (Only the indicative map of CFM applications under review in 2015 is currently available).	(II) In progress. The government now shares the indicative maps of social forestry on their website for public scrutiny. We are co-producing a book of MEPS findings and application of MEPs methods in monitoring and evaluating social forestry projects. This book and guidance is drafted and planned to be completed this calendar year, after which it would be disseminated to civil society and hosted on the MEPS website.
	(III) By the end of project, at least one CFM area is approved in a socially and environmentally appropriate area in West Kalimantan.	(III) We identified socially and environmentally appropriate areas as those within the Watershed Protection Zone in Indonesia's land-use planning system (see Output 1). Using information on allocated CFM areas in government maps we tracked the number of CFM areas and proportion of total extent approved in each zone. This was done before our project (up until 2015), during the project (2016-2018) and around 2018/early 2019. Although there is a reduction in the number of CFM areas approved in the Watershed Protection Zone over time, CFM is still allocated there. Indeed 21% of those areas allocated to CFM in Kalimantan during 2018 were in this zone, which broadly reflects the amount of potential land suitable for CFM that remains. We are therefore making some progress with this indicator, and will be in a good position to demonstrate achievement 2-3 years post project (especially after the book and guidance from indicator II is disseminated).
	(IV) By end of project, the rate of forest clearance by local communities in CFM areas across Kalimantan is reduced by at least 5% compared to non-CFM areas of similar biophysical and geographical characteristics.	(IV) We updated our counterfactual analyses of deforestation data published and disseminated for Output 1, to match the timeframe of our project. By 2019 the rates of forest clearance across CFM in Kalimantan was reduced by 8.7% compared to non-CFM areas of similar biophysical characteristics. This demonstrates that sufficient amount of forest is being managed well as CF in socially and environmentally appropriate areas.

Project summary	Measurable Indicators	Progress and Achievements
Output 1. A robust evidence base (incl. pre-intervention baseline) available to assess CF and evaluate consequences on human livelihoods and environment (mo 1-15)	1.1 Kalimantan-wide spatial data produced of biodiversity provisions, ecosystem functions and other environmental characteristics relevant to land-use planning and evaluation of CF applications (mo 9). 1.2. Kalimantan-wide village level databases collated of poverty indicators from Central Agency on Statistics national census (e.g. household income, non-food expenditure); baseline data describing social perceptions on land-use (previously collected by Meijaard and spatially modelled across Kalimantan) split by village and linked to these data (mo 9). 1.3 Kalimantan-wide spatial database of existing and proposed CF areas that potential synergies and conflicts between CF and protective land-uses can be identified (mo 12, 24, 36). 1.4 Kalimantan-wide annual deforestation rate using freely available Landsat imagery, estimates 2000-2015 as baseline (mo 6). 1.5 Confirmation of at least 4 CF case-studies involving village heads and local communities in West Kalimantan by mo	**Output achieved.** Indicators: 1.1. **Completed**. Indicator was appropriate. 1.2. **Completed** from government PODES surveys. 16 multidimensional poverty indicators chosen, and analyses contributed to policy briefs in 2018 and publication in May 2019 in People and Nature. PODES 2018 census data are still being processed, but will be available within 6 months. Appropriate indicator. 1.3. **Completed** by April 2016 from government 'PIAPS' map, which was made publically available by Ministry of Forest and Environment in 2016: http://webgis.dephut.go.id:8080/kemenhut/index.php/id/peta/petapiaps Appropriate indicator. 1.4. **Completed** by end of project. Layers presented on project website. Data presented in policy briefs and publication (Global Environmental Change) in 2017. Appropriate indicator, establishing a baseline during the project period. 1.5/1.6 **Completed**. Poverty indicators selected from FFI's prior consultation in West Kalimantan villages as well as extensive household research by CIFOR. Households in 8 villages (4 with CF; 4 without) surveyed in Kapuas Hulu and Ketapang regencies in 2017 to generate data to help validate national PODES data. Findings feature in policy briefs, workshop presentation material and People and Nature publication. Appropriate indicator.

Project summary	Measurable Indicators	Progress and Achievements
	12. 1.6 Case-study village visits for participatory workshops with local communities to identify multidimensional poverty indicators (e.g. health, empowerment, trust, access to resources). Subsequent baseline survey across case-study areas (mo 15). Production of a social network analysis linking local communities in case-study areas to governmental and non-governmental stakeholders in CFM allocation (mo 18 - see also Output 2)	
Activity 1A Project team inception meeting …		**Completed in year 1**. Participant list and meeting minutes in Ann.1.
Activity 1B Consultation meeting/workshop at start of project with key personnel within national government ministries and relevant NGOs, to identify evidence-base required for subsequent analyses.		**Completed in year 1.** Participant list, perception questionnaire results and meeting minutes in Ann.2.
Activity 1C Collate Kalimantan-wide baseline spatial data on environmental attributes and poverty indicators, that are pertinent to allocating CF.		**Completed in year 1.** Presented on project website.
Activity 1D Update maps of proposed and allocated CF from government sources; update of Kalimantan-wide database.		**Completed in years 1 & 2.** The maps acquired in Q3 of year 1 (from Ministry of Environment and Forestry's Directorate General of Social Forestry and Partnership) are still current, and .kml versions are hosted on our website.
Activity 1E Update baseline deforestation estimates since 2000 using forest cover data available after the 2015 forest fires.		**Completed in years 1 & 2.** Used the data to undertake spatial matching analysis to evaluate whether CF areas avoided deforestation. Published in *Global Environmental Change* in year 2 *People and Nature* in year 3. Deforestation trends presented on website maps.
Activity 1F Prepare publication: Socio-economic and ecological performance of CFMs in Indonesia: evidence from Kalimantan' (target: *Conservation Letters or Human Ecology*).		**Completed in year 3.** Completed another spatial matching analysis of CF areas based on government poverty census data (PODES). Published in *People and Nature* in May 2019.
Activity 1G Site visits and participatory workshops in 4 CFM case study villages to develop case studies to inform government guidance documents, and also identify and rank baseline multidimensional poverty indicators….		**Completed in years 1 & 2**. Multidimensional poverty indicators identified in year 1 from previous surveys undertaken by FFI who had previously visited all villages. Eight villages (4 with CF; 4 without) were identified from the spatial matching analyses and households surveys undertaken using the 'Nested Spheres of Poverty' toolkit early in year 2 (Annex 7.2.3). Information collected was used to help validate the household data with national census data, and contributed to policy brief (Annex

Project summary	Measurable Indicators	Progress and Achievements
		7.2.5).
Output 2. Guidance on CFM assessment from 'Output 1' widely disseminated amongst government and non-governmental stakeholders, and contributing to increased advocacy and new CFM development in West Kalimantan (mo 15-36).		**Output achieved.**
	2.1 Policy brief produced based on key project outputs (i.e. 1.1-1.4, 1.6, 2.1, 2.3 in mo 15; updated with 1.3, 1.5 in mo 30). Presented and circulated to government agencies and relevant mechanisms (e.g. Ministry of Environment and Forestry, CBD, National Peatland Restoration Body). Also available on project and associated websites (mo 15, updated mo 30; 200 copies per year). 2.2 Three facilitators trained in CFM policy, planning processes and how to use key project datasets (mo 18). 2.3 Best practice guidelines based on case-studies (see 1.6) printed and disseminated to at least 25 governmental and non-governmental organisation (NGO) personnel (e.g. local planning offices, CIFOR, FFI Indonesia, Indigenous Movement Alliance/AMAN) at dedicated workshops in Kalimantan (mo 24; 200 copies). 2.4 Two stakeholder consultation workshops in Kalimantan (Ketapang and Kapuas Hulu regencies) to present datasets and guidelines, garner feedback, and generate CFM social network analysis to facilitate communication between government and non-governmental (mo18). At least a 20% increase from previous year in NGOs citing importance of sustainable CFM in national media (e.g.	Indicators*:* 2.1 **Completed by July 2017**, and later hosted on project website. Appropriate indicator 2.2 **Completed ahead of each event**, most applicable to GIS training in August 2018. Weak indicator as facilitators changed throughout project. 2.3 **Completed April 2018**, and later hosted on project website.. Appropriate indicator 2.4 **Completed by September 2017**. Further consultation workshops undertaken, and final GIS training workshop in August 2018 used to track changes in perception and understanding.

Project summary	Measurable Indicators	Progress and Achievements
	newspapers, conferences, websites) between months 18 & 36. At least a 10% increase in government representatives citing the importance.	
Activity 2A Policy brief on CF produced and circulated to government….		**Completed in years 1 & 2.** National-level policy brief published in the Indonesian journal Strategic Review in year 1. Policy briefs based on findings for Kapuas Hulu and Ketapang regencies produced and circulated to Kalimantan POKJA in year 2.
Activity 2B 3 facilitators trained ahead of workshops (mo20).		**Completed in year 2.**
Activity 2C Guidelines of best practice based on the case studies produced & circulated to government stakeholders…		**Completed in year 2.** Changed to a brief on poverty monitoring methods using information from Activity 1G. Produced and disseminated in Q4 of year 2.
Activity 2D Public outreach through press releases, opinion pieces and social media. Measure amount of coverage before and after media campaign.		**Completed by end of project.** Media activity reduced after years 2 and 3 due to the mixed feedback received by some readers (who had strong and quite polarised views on CF in Indonesia). Opinion pieces limited to articles in Strategic Review and Kompas Indonesia in year 1, and Mongabay.com in year 2. Focused o disseminating findings to other conservation professionals in SE Asia – most of team attended the Association for Tropical Biology and Conservation (ATBC) international conference in Kuching, Malaysia in July 2018, and presented five talks informed by the MEPS project. In each presentation slot we introduced the MEPS project, linked to the website and promoted the Darwin Initiative brand.
Activity 2E Two stakeholder consultation workshops with local governmental and non-governmental organisations, and indigenous groups...		**Completed in years 2 and 3.** First consultation in Q2 of year 2 involved participants in West Kalimantan and circulation of first policy briefs on performance of CF in avoiding deforestation. Second workshop undertaken in Q4 of year 2 involved broader audience across Kalimantan, and circulation of poverty material. Third event (Activity 3B) took place as a GIS training workshop in Q2 of year 3 in Central Kalimantan and involved several individuals from previous events.
Activity 2F Social network analysis linking local communities with other stakeholders in CF allocation. Subsequent open-access publication (mo 15).		**Completed in years 2 & 3.** Fieldwork/interviews took place in the second half of year 2, and formed a chapter in Friedman's PhD thesis. Analyses and report on the network submitted for publication in Land-Use Policy in year 3. Awaiting outcome.
Output 3. Increased understanding and capacity to transparently manage, monitor and evaluate land for CFM within	3.1 One governmental planning department staff educated to MSc level, trained in spatial planning (using datasets outlined in Output 1) and workshop	**Output achieved.** **Output achieved***:* 3.1 **Completed by September 2018**. Appropriate indicator 3.2 **Completed by end of project**. Target exceeded by pooling participants at

Project summary	Measurable Indicators	Progress and Achievements
government (yr3).	facilitation (mo30). 3.2 At least 17 government staff trained in use of datasets and evidence-based planning techniques at workshop in Jakarta (3 from each Ministry of Spatial Planning, Forestry & Environment, Agriculture, and Finance in Kalimantan and 1 from each in Jakarta, plus national representative from the Ministry of Female Empowerment to ensure gender is implicit in the participatory design) (mo32). 3.3 Change in perceptions and understanding of environmental/poverty datasets as well as causal relationships between CFM policy and consequences among the trained government personnel between workshops in years 2 and 3. Specific indicators based on key information in guidance outputs produced via 2.1 and 2.3. Baseline perceptions established during year 2 workshop as part of Output 2.4 (mo 18 & 32).	poverty methods and GIS training workshops, which is appropriate given how the project progressed and adapted to the changing needs of stakeholders. 3.3 **Completed by end of project** (see M&E report; Annex 7.3.7). Appropriate indicator – could have been split to make it clearer
Activity 3A Postgraduate training of a government planning staff …		**Completed in year 3.** Erlangga Mohamed of FFI began his studies in September of year 2, and passed his MSc in Conservation and Rural Development in September of year 3 (Annex 7.3.5).
Activity 3B Stakeholder workshops with governmental and targeted NGOs, to train in planning techniques, and evaluate change in perceptions. Press briefing linked to workshops via LIPI communications team.		**Completed in year 3.** A follow up training workshop in GIS techniques and the dataset used by the project was completed in August year 3 in Palangkaraya (Central Kalimantan) and involved several participants that attended previous events (Activity 2E). Press briefs cancelled due to hostility from some NGOs. Meijaard, Ahmad and Hutabarat participated in discussions on CF with the World Bank Jakarta Office in October 2018). World Bank are set to support the Indonesian government in the implementation and monitoring of community forestry, and were tendering to fund related projects across Indonesia. The discussions centred around the use of our monitoring protocols on deforestation and poverty, to help prioritise where funds should be invested and/or help monitor the effectiveness of funded

Project summary	Measurable Indicators	Progress and Achievements
		projects.
Activity 3C Measure changes in environmental and poverty indices used and disseminated to government via stakeholder workshop and to NGOs via media/website (annual meeting ahead of Darwin report).		**Completed by end of project**. Deforestation and poverty data used in policy briefs and training exercises were updated for the publication in *People and Nature* (Activity 1F). 2017/18 PODES poverty data have only recently been distributed by Indonesian government and so have not been processed and published within project timeframe.
Activity 3D Measuring of perceptions and changes to beliefs/mind-sets among government personnel.		**Completed by end of project.** Wildlife Impact undertook the work and found participants were largely enthusiastic about MEPS findings and proposed methods, and welcomed further input on monitoring and evaluation techniques (Annex 7.3.7).

Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Title or Focus	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis						
1b	Number of PhD qualifications obtained						
2	Number of Masters qualifications obtained	1	Indonesia	Male	MSc Conservation and Rural Development	English	
3	Number of other qualifications obtained						
4a	Number of undergraduate students receiving training						
4b	Number of training weeks provided to undergraduate students						
4c	Number of postgraduate students receiving training (not 1-3 above)						
4d	Number of training weeks for postgraduate students						
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above)						
6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	11	Indonesia	Male	GIS training on monitoring and evaluation of social forestry	Indonesia	
6b	Number of training weeks not leading to formal qualification	1					
7	Number of types of training materials produced for use by host country(s) (describe training materials)	1	Indonesia	Female lead	GIS training on monitoring	Indonesia	

					and evaluation of social forestry		

Research Measures		Total	Nationality	Gender	Title	Language	Comments/ Weblink if available
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)						
10	Number of formal documents produced to assist work related to species identification, classification and recording.						
11a	Number of papers published or accepted for publication in peer reviewed journals	2	Indonesia	Female	*Global Environmental Change (2017)* *People and Nature (2019)*	English	https://bit.ly/2WFdB18 https://bit.ly/2FjIUJ9
11b	Number of papers published or accepted for publication elsewhere	1	Indonesia	Male	Strategic Review (Indonesia)	Indonesia	Archived on project website
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	2	Indonesia		Aligned PODES data Aligned deforestation data	Indonesia	
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country						

13a	Number of species reference collections established and handed over to host country(s)						
13b	Number of species reference collections enhanced and handed over to host country(s)						

Dissemination Measures		**Total**	**Nationality**	**Gender**	**Theme**	**Language**	**Comments**
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	5	Indonesia	Mixed	4 x dissemination workshops. 1 x GIS training	Indonesia	
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	5	Mixed	Mixed	1 x national Tenure conference 4 x presentation talks at ATBC conference	English	

Physical Measures		**Total**	**Comments**
20	Estimated value (£s) of physical assets handed over to host country(s)	0	
21	Number of permanent educational, training, research facilities or organisation established	0	
22	Number of permanent field plots established	0	Please describe

Financial Measures		**Total**	**Nationality**	**Gender**	**Theme**	**Language**	**Comments**
23	Value of additional resources raised from other sources	0					

	(e.g., in addition to Darwin funding) for project work						

Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	✓
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	✓
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	✓
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	
14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking	

	into account the needs of women, indigenous and local communities, and the poor and vulnerable.	
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	

Annex 5 Publications

Provide full details of all publications and material that can be publicly accessed, e.g. title, name of publisher, contact details. Mark (*) all publications and other material that you have included with this report

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. web link, contact address etc)
Policy Journal	Getting community forest reforms right. Erik Meijaard, Sugeng Budiharta, & Truly Santika 2016	Netherlands	Brunei	Male	Strategic Review – Indonesian Journal of Leadership, Policy and World Affairs	https://research.kent.ac.uk/meps/wp-content/uploads/sites/157/2018/05/Strategic-review-article-Dec-2016.pdf
Academic journal	Community forest management in Indonesia: avoided deforestation in the context of anthropogenic and climate complexities. Truly Santika, Erik Meijaard, Sugeng Budiharta, Elizabeth A. Law, Ahmad Kusworo, Joseph Hutabarat, Tito Indrawan, Matthew Struebig, Sugeng Raharjo, Imanul Huda, Sulhani, Andini Ekaputri, Soni	Indonesia	Brunei	Female	Global Environmental Change, Elsevier	https://www.sciencedirect.com/science/article/pii/S0959378016305933

	Trison, Madeleine Stigner Kerrie Wilson 2017					
Policy brief	Social Forestry Performances in Ketapang District, West Kalimantan, MEPS Policy Brief I. Truly Santika, Ahmad Kusworo, Sugeng Budiharta, Erik Meijaard, Matthew Struebig 2017	Indonesia	Brunei	Female	MEPS project	https://research.kent.ac.uk/meps/policy-briefs/
Policy brief	Social Forestry Performances in Kapuas Hulu District, West Kalimantan, MEPS Policy Brief II. Truly Santika, Ahmad Kusworo, Sugeng Budiharta, Erik Meijaard, Matthew Struebig 2017	Indonesia	Brunei	Female	MEPS project	https://research.kent.ac.uk/meps/policy-briefs/
Online Commentary	Does social forestry always decrease deforestation and poverty? Erik Meijaard	Netherlands	Brunei	Male	Mongabay.com	https://news.mongabay.com/2017/09/social-forestry-sometimes-but-not-always-decreases-deforestation-and-poverty-commentary/
Policy brief	Monitoring poverty in social forestry areas, MEPS Policy Brief III.	Indonesia	Indonesia	Male	MEPS project	https://research.kent.ac.uk/meps/policy-briefs/

	Ahmad Kusworo, Tito Indrawan, Joseph Hutabarat, Truly Santika, Rachel Friedman, Sugeng Budiharta, Erik Meijaard, Freya St. John, & Matthew Struebig 2018					
Academic journal	Heterogeneous impacts of community forestry on forest conservation and poverty alleviation: Evidence from Indonesia Truly Santika, Kerrie Wilson, Sugeng Budiharta, Ahmad Kusworo, Erik Meijaard, Elizabeth Law, Rachel Friedman, Joseph Hutabarat, Tito Indrawan, Freya St. John, Matthew Struebig. 2019	Indonesia	Brunei	Female	People and Nature, Wiley	https://besjournals.onlinelibrary.wiley.com/doi/full/10.1002/pan3.25

Annex 6 Darwin Contacts

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